



FINAL

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

MAY 05 2009

Ms. Carla Adduci
Principal Air Quality Engineer
TRC Environmental Corporation
1200 Wall Street West, 2nd Floor
Lyndhurst, NJ 07071

Re: Applicability Determination for the Garden State Offshore Energy Proposed
Offshore Meteorological Station

Dear Ms. Adduci:

By letter dated April 7, 2009, TRC Environmental Corporation, on behalf of Garden State Offshore Energy (GSOE), requested the U.S. Environmental Protection Agency (EPA)'s concurrence on a preliminary determination that the proposed GSOE meteorological station (met tower) neither requires a preconstruction permit nor needs to submit a Notice of Intent (NOI). Specifically, GSOE proposes to construct, operate, and decommission a meteorological station in federal waters approximately 16 to 20 miles off the coast of Southern New Jersey for the purpose of gathering data in order to determine whether the site is appropriate for the construction of a 350 megawatt (MW) wind farm. The met tower will be operated for approximately two to five years and will be removed at the end of that period. Based on information provided in your letter, EPA does not concur with your position and has determined that a minor source preconstruction permit is needed pursuant to N.J.A.C 7:27-8 "Permits and Certificates for Minor Facilities" (Subchapter 8) and a NOI is required to be submitted to the Regional Administrator pursuant to 40 CFR 55.4. Our rationales for these conclusions are delineated below.

N.J.A.C 7:27-8 "Permits and Certificates for Minor Facilities"

- Based on N.J.A.C 7:27-8.2 "Applicability" criteria, a commercial fuel burning equipment with a maximum rated heat input of 1,000,000 BTU/hr or greater, and any stationary reciprocating engine with a maximum rated power output of 37 kW or greater that is used for generating electricity, are significant sources and therefore require a permit. Neither commercial fuel burning equipment nor stationary reciprocating engines are defined in Subchapter 8.
- The definition of a stationary reciprocating engine is contained at N.J.A.C 7:27-19.1 "Definitions" (Subchapter 19) and means "...any reciprocating engine that remains for more than 30 days at a single site (for example, any building, structure, facility, or

installation)". Moreover, Subchapter 19 establishes oxides of nitrogen (NOx) emission limitations for stationary reciprocating engines that meet the above definition.

Consequently, under Subchapter 8, commercial fuel burning equipment with a rated heat input of at least 1,000,000 BTU/hr¹ is a significant source and requires an air permit regardless of how many days it remains at a single site. The fact that certain fuel burning equipment does not meet the definition of a stationary reciprocating engine would only exempt it from complying with Subchapter 19 provisions, but not from obtaining an air permit under Subchapter 8 or from complying with all other applicable New Jersey air regulations.

Thus, the generators proposed by Garden State Offshore Energy for the construction, operation, and decommissioning phases of their met tower with a rated power of at least 1,000,000 BTU/hr, are significant sources that need an air permit under Subchapter 8's provisions, and are also required to comply with all applicable air regulations. If the design or size of the GSOE's fuel combustion sources remain the same, then an air permit under Subchapter 8 would be required.

40 CFR 55.4 "Requirements to submit a notice of intent"

As stated at 40 CFR 55.4 (a) "Prior to performing any physical change or change in the method of operation that results in an increase in emissions, and no more than 18 months prior to submitting an application for preconstruction permit, the applicant shall submit a Notice of Intent to the Administrator through the EPA Regional Office..."

Consequently, since the proposed GSOE's met tower project results in an increase in emissions and also requires a preconstruction permit, a NOI including the items specified at 40 CFR 55.4 (b) should be submitted to EPA. The NOI should include the following:

- Geophysical and geotechnical site survey related emissions (equipment associated with the seabed boring operations):
 - Emissions from diesel powered drilling equipment.
 - Emissions from support vessel engines and portable generators used on vessels and barges resulting during the boring operations while the vessels or barges are attached to the seabed.

The vessel engines' emissions en route to the site before any boring occurs need not be included in the potential to emit.

¹ Based on our calculations 1,000,000 BTU/hr converts to approximately 107 kW. The typical equipment list (page 2 of 5 of your letter) mentions generators rated at 250 kW. Thus, a generator equal to or greater than 107 kW (i.e. 250 kW) would have a heat input rate equal to or greater than the applicability threshold of 1,000,000 BTU/hr.

- Installation of met tower related emissions (equipment involved in pile and platform installation, etc.):
 - Emissions from the diesel powered cranes, pile hammer, etc.
 - Emissions from vessels, crane barges, tugboats, and portable generators on vessels, barges, or tugboats (if attached to the ocean floor).
 - Emissions from supply vessel engines, crew boats, tugboats, and portable generators on vessels, barges, tugboats en route to or from the met tower.
- Operation of met tower related emissions (diesel powered generators on the met tower platform, diesel storage tank and maintenance vessels en route to or from the met tower):
 - Emissions from the diesel powered generators and diesel storage tank.
 - Emissions from maintenance vessels en route to or from the met tower.
- Decommission of met tower related emissions (equipment involved in removing the piles, platform, etc.):
 - Emissions from diesel powered cranes and dredgers.
 - Emissions from vessels, crane barges, tugboats, and portable generators on vessels, barges or tugs (if attached to the ocean floor).
 - Emissions from supply vessel engines, crew boats, tugboats, and portable generators on vessels, barges, or tugboats en route to or from the met tower.

Additionally, the following information shall be provided for each combustion source included in the NOI:

- Make/Model (if available).
- Combustion Source Description: type (i.e. portable, marine engine, etc), function performed (i.e. generating electricity, producing mechanical power, etc.), and number of days on site.
- Source rating: max. Gross heat input (MMBTU/hr), electrical output (kW), and power output (BHP).
- Emission factors of air contaminants: g/BHP-hr, g/kW-hr, lb/MMBTU, etc., and source of emission factors.
- Fuel: type, amount, and sulfur content.
- Operating hours: number of hours per phase of the met tower project.
- Emission rates: hourly emissions (lb/hr), annual emissions (TPY), and all equations, formulas and assumptions used to calculate the emissions.

EPA values the important role that wind energy plays in meeting the environmental and energy challenges of our country and, thus, recognizes that the GSOE's wind farm project is an essential component of developing electricity from clean and renewable power. For this reason, EPA is prepared to help GSOE to move forward with this project while ensuring that a permit meeting the requirements of the CAA and associated rules and regulations is issued. We look forward to working with GSOE on this project and hope that this letter facilitates these efforts.

If we can answer any questions regarding our comments, please feel free to call my office at 212-637-4074, or to speak with Ms. Viorica Petriman at 212-637-4021 and Lionel Mackenzie at 212-637-3770.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven Riva". The signature is fluid and cursive, with the first name "Steven" and last name "Riva" clearly distinguishable.

Steven Riva, Chief
Permitting Section
Air Programs Branch

cc: Erin Gorman, PSEG
John Preczewski, NJDEP